

ABSTRACT OF THE DISCLOSURE

The present invention provides a method and an apparatus for generating post-machining three-dimensional shape data for a workpiece on the basis of an NC program. The three-dimensional shape data generating apparatus comprises: a stock blank lattice point generating section (11) which represents the shape of a stock blank for the workpiece by three-dimensional lattice point data (L) comprising a multiplicity of lattice points on the basis of stock blank shape data; a tool path processing section (12) which generates data indicative of a tool traveling region in which the tool is to move with respect to the workpiece on the basis of the NC program, tool shape data and the stock blank shape data, then removes lattice points located in the tool traveling region; and a shape data generating section (15) which generates the post-machining three-dimensional shape data for the workpiece on the basis of the remaining lattice points.